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Hiroyuki Akatsu et al.

In the Claims:

1-4. (cancelled)

5. (currently amended) A bipolar transistor as claimed in claim 21-2, further comprising a ~~shallow-trench isolation~~, wherein said dielectric region includes a layer of silicon nitride extending between said shallow trench isolation and said slanted sidewall of said collector pedestal.

6. (currently amended) A bipolar transistor as claimed in claim 5 further comprising a dielectric spacer, wherein said raised extrinsic base is self-aligned to said emitter and spaced from said emitter by said dielectric spacer.

7. (cancelled)

8. (currently amended) A bipolar transistor, comprising:
a collector including a frustum-shaped collector pedestal having an at least
substantially planar upper surface, a lower surface, and a slanted sidewall extending
between said upper surface and said lower surface, wherein said upper surface has an
area substantially less than an area of said lower surface;
an intrinsic base overlying all of said area of said upper surface of said
collector pedestal;

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an emitter overlying said intrinsic base;
a raised extrinsic base conductively connected to said intrinsic base; and
a dielectric region extending along said slanted sidewall of said collector
pedestal adjacent to said upper surfaceA bipolar transistor as claimed in claim 7, wherein a centerline of said emitter is aligned to in alignment with a centerline of said collector pedestal.

9. (currently amended) A bipolar transistor as claimed in claim 8, wherein each of said centerlines of said emitter and said collector pedestal are-is aligned to a wall of within a single opening in a layered stack of materials.

10. (currently amended) A bipolar transistor as claimed in claim 8, wherein said intrinsic base includes a layer of a single-crystal semiconductor which forms a heterojunction with at least one of said emitter and said collector pedestal.

11-20. (cancelled)

21. (new) A bipolar transistor as claimed in claim 9, further comprising a shallow trench isolation and a conductive collector contact via, said collector further including a first active area and a second active area disposed in a single-crystal semiconductor region, each of said first and second active areas having major surfaces extending in lateral directions defining a major surface of said semiconductor region, said first active area underlying said collector pedestal and said second active area being

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separated in at least one of said lateral directions from said first active area by said shallow trench isolation, wherein said collector contact via overlies said second active area.

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